

(217) 782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- RENEWAL

PERMITTEE

Cinetic Landis Grinding Corporation  
Attn: Ed Hollenbeck  
481 Gardner Street  
South Beloit, Illinois 61080

<u>Application No.:</u> 96020097	<u>I.D. No.:</u> 201045AAD
<u>Applicant's Designation:</u>	<u>Date Received:</u> March 20, 2006
<u>Subject:</u> Abrasive Grinding Wheels Manufacturing	
<u>Date Issued:</u>	<u>Expiration Date:</u>
<u>Location:</u> 481 Gardner Street, South Beloit, Winnebago County	

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of twenty-four resins and abrasives mixers controlled by dust collector, ten grinding wheel curing ovens, four paint booths and three boilers pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 10 tons/year for a single hazardous air pollutant (HAP) and 25 tons/year for combined HAPs). As a result, the source is excluded from the requirements to obtain a CAAPP permit. The maximum emissions of this source, as limited by the conditions of this permit are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permit(s) issued for this location.
2. This permit is issued based upon the coating operations are exempt from emission limitations of 35 Ill. Adm. Code Part 215, Subpart F: Coating Operations, due to emissions of volatile organic materials (VOM) from these operations being less than exemption level of 25 tons/year established by Section 218.206(a).
3. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source, with the following exception: If no odor nuisance exists these limitations shall apply only to photochemically reactive material (35 Ill. Adm. Code 215.301).
4. The emissions of HAPs as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish by rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.

5. Operation and emissions from grinding wheel molding and curing operations shall not exceed the following limits:

Phenolic Resin Usage: 35 tons/mo, 350 tons/yr

<u>Pollutant</u>	<u>Emission Factor (Lb/Ton)</u>	<u>Emissions</u>	
		<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
Formaldehyde	55.4	0.97	9.7
Phenol	24.8	0.43	4.3
		Total VOM	14.0

These limits are based on the maximum production rate and emission factors derived from the stack test performed at the source. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months.

6. Emissions from the four paint booths shall not exceed 1.0 ton/month and 8.0 tons/year of VOM and 0.6 tons/month and 6.0 tons/year of total HAPs. The VOM/HAP emissions shall be calculated using the following equation:

$$E = \Sigma(M_i \times V_i), \text{ where:}$$

E - VOM/HAP emissions (tons);

$M_i$  - VOM/HAP-containing raw materials usage (tons);

$V_i$  - VOM/HAP content of raw materials (fraction);

These limits are based on the maximum production rate. Compliance with annual limits shall be determined from a running total of 12 months of data.

7. Operation and emissions of the natural gas combustion equipment shall not exceed the following limits:

Natural Gas Usage: 50 mmscf/Mo, 450 mscf/Yr

<u>Pollutant</u>	<u>Emission Factors (lb/mmscf)</u>	<u>Emissions</u>	
		<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
Nitrogen Oxides (NO <sub>x</sub> )	100	2.5	22.5
Carbon Monoxide (CO)	84	2.1	18.9
Particulate Matter (PM)	7.6	0.2	1.7
Volatile Organic Materials (VOM)	5.5	0.1	1.2

These limits are based on the maximum operating rate and standard emission factors. Compliance with annual limits shall be determined from a running total of 12 months of data.

8. This permit is issued based on negligible emissions of particulate matter from the resin and abrasives mixing operations. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
9. The Permittee shall maintain monthly records of the following items:
  - a. Names and amounts of all VOM and HAP-containing raw materials used at the source (tons/mo, tons/yr);

- b. VOM and HAP content of raw materials in item (a) (wt %);
  - c. VOM and individual and total HAP emissions with supporting calculations (tons/mo, tons/yr);
  - d. Natural gas consumption (mmscf/mo, mmscf/yr).
10. All records and logs required by this permit shall be retained at a easily accessible location at the source for at least five years from the date of entry and shall be made available for inspection and copying by the Illinois EPA and USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to the Illinois EPA request for records during the course of a source inspection.
11. If there is an exceedance of or deviation from the requirements of this permit as determined by the record required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance/deviation. The report shall include the emissions released in accordance with the record keeping requirements, a copy of the relevant records, and a description of the exceedance or deviation and efforts to reduce emissions and future occurrences.
12. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, IL 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control - Regional Office  
5415 North University  
Peoria, Illinois 61614

If you have any questions on this permit, please call Valeriy Brodsky at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:VJB

cc: Illinois EPA, FOS Region 1  
Illinois EPA, Compliance Section  
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emission from the Abrasive Grinding Wheels & Machines Manufacturing Plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. This is usage of 350 tons of phenolic resin per year. The resulting maximum emissions are below the levels, e.g., 10 tons per year for a single HAP, and 25 tons per year for combined HAPs at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that material is handled, and control measures are more effective than required in this permit.

E M I S S I O N S (tons/year)

Process	VOM	NO <sub>x</sub>	CO	PM	Formaldehyde	Phenol	Total HAP
Molding/curing	14.0				9.7	4.3	14.0
Painting	8.0						6.0
Mixing				0.4			
Gas Combustion	1.2	22.5	18.9	1.7			
Total	23.2	22.5	18.9	2.1	9.7	4.3	20.0

DES:VJB